

Claims

1. Method for preparing a material, comprising a base material (4) provided with a water-insoluble substance, a covering micro-organism layer (1) and optionally a growth substrate, said method comprising
  - applying a water-insoluble substance to the base material,
  - 5 - optionally applying a growth substrate for growing a micro-organism to the base material; and
  - applying a micro-organism layer to the base material comprising the water-insoluble material.
2. Method according to claim 1, wherein the base material is subjected  
10 to a treatment in a heated medium while applying the water-insoluble substance, preferably at a temperature in the range of 30 to 240 °C, more preferably in the range of 60-160 °C, even more preferably in the range of 70-120 °C.
3. Method according to claim 2 or 3, wherein the base material is dried  
15 at an elevated temperature, in particular at a temperature in the range of about 100-140 °C, after applying the water-insoluble substance.
4. Method according to any of the preceding claims, wherein at least part of the water-insoluble substance is applied by impregnation into the base material.
- 20 5. Method according to any of the preceding claims, wherein the water-insoluble substance is applied as a mixture comprising the water-insoluble substance and a solvent for the water-insoluble substance.
6. Method according to claim 5, wherein the solvent is selected from the group consisting of alcohols, ethers and ketones.
- 25 7. Method according to any one of the preceding claims, wherein the growth substrate is applied in a layer together with the micro-organism and/or

as a separate layer (between the base material and the micro-organism), before applying the micro-organism layer.

8. Material obtainable by a method according to any one of the preceding claims.

5 9. Material, preferably obtainable by a method according to any one of the claims 1-8, comprising a base material (4) provided with a layer comprising a water-insoluble substance at the surface and/or on the surface of the base material, and a covering micro-organism layer.

10 10. Material according to claim 8 or 9, which is at least partially impregnated with the water-insoluble substance.

11. Material according to any one of the claims 8-10, wherein at least part of the water-insoluble substance is present in a coating (3) on top of the surface of the base material.

15 12. Material according to any one of the claims 8-11, wherein the water insoluble coating has a thickness in the range of 1-1000  $\mu\text{m}$ .

13. Material according to any one of the claims 8-12, wherein the water-insoluble substance comprises at least one component selected from mineral oils and waxes, vegetable oils and waxes and animal oils and wax, preferably at least one component selected from vegetable oils and vegetable waxes.

20 14. Material according to claim 13, wherein the water-insoluble substance is selected from the group C4 to C32 saturated and unsaturated fatty acid-esters, and preferably is a fatty acid ester of a fatty acid with glycerol or another polyol.

25 15. Material according to any one of the claims 8-14, wherein a growth substrate is present in the micro-organism layer (1), and/or in an intermediate growth substrate layer (2) between the micro-organism layer (1) and the base material (4), adjacent to the micro-organism layer.

30 16. Material according to any one of the claims 8-15, wherein a growth substrate is present selected from the group consisting of carbohydrates and proteins including derivates and mixtures thereof.

17. Material according to any one of the claims 8-16, wherein the thickness of the micro-organism layer is less than about 1000  $\mu\text{m}$ , preferably from about 5-100  $\mu\text{m}$ .

18. Material according to any one of the claims 8-17, wherein the micro-  
5 organism layer comprises at least one micro-organism selected from the group consisting of bacteria and fungi – in particular from the group of black yeasts and related fungi - preferably from the group of pigmented micro-organisms.

19. Material according to claim 18, wherein the micro-organism layer comprises *Aureobasidium spp.*

10 20. Material according to any one of the claims 8-19, wherein the base material is selected from the group consisting of wood, concrete, ceramic and stone, preferably wood.

21. Material according to any one of the claims 8-20, wherein the material is a construction or building material.

15 22. Use of a material according to any one of the claims 8-21 in an application without soil contact.

23. Garden furniture, fence, façade element or cladding comprising a material according to any one of the claims 8-21.